

### **ABSTRACT OF THE DISCLOSURE**

The present invention refers to a novel type of cracking furnaces comprising a firebox provided with cracking coils - the cracking coils having at least one inlet, at least one inlet section, at least one outlet and at least one outlet section - and burners, wherein the parts of the coils are shielded. The invention further relates to a process for cracking hydrocarbon feeds, making use of a furnace according to the invention.